ORNITHOLOGICAL LITERATURE

THE PHEASANTS OF THE WORLD. By Jean Delacour. Country Life Limited, London, and Charles Scribner's Sons, New York, 1951:8% × 11½ in., 347 pp., with 16 color plates and 16 monochrome plates, and 21 maps and diagrams. \$35.00.

No ornithologist living today is better fitted to attempt the task of preparing a new monograph on the pheasants than Jean Delaeour. It is a particular pleasure then that he has chosen to do so, and to revise and emend so carefully and notably the previous monographs on one of the most beautiful of all avian families. His immediate predecessor in an illustrious line was Dr. William Beebe, whose four magnificent volumes on the subject, published between 1918 and 1922, have long been out of print as well as somewhat outmoded by advancing knowledge. Beebe's principal contributions were the observations on living birds made for the first time by a naturalist on many of the least known species.

Delacour during his remarkable career has been able to combine to an unusual extent the field and museum researches of an ornithologist with the patient study of a careful and recording aviculturist. Too few ornithologists have had any practical or first-hand experience with birds kept under observation in aviaries or at semi-liberty. Too few aviculturists are sufficiently trained or interested to keep records and observe various characteristics of the birds in their possession. It is the blending of work in the field, the museum, and the aviary that has given Mr. Delacour an unrivalled opportunity to study pheasants. It seems to me that such experience is a necessary requisite in any definitive study of these rare, secretive, and yet manageable birds.

The plan of this volume is admirable. Mr. Delaeour has worked out what seems to this writer a practical and convenient systematic arrangement of the various genera and species, emphasizing relationships rather than diversity (presumably the aim of systematics). He has included under each genus a general discussion of range, field notes, and, in many cases, an important amount of material on the occurrences of these forms in captivity, their breeding, food habits and the like. Following this is a more detailed discussion of the species or subspecies, concise and to the point, which serves to make the amateur feel as much at home among the groups under discussion as the professional. Particularly serviceable in this connection is a detailed discussion of the forms of the true pheasants, *Phasianus*. Delacour recognizes two species and his break-downs into smaller groups and excellent distribution maps serve to create order out of what had been a chaos of races of these plastic birds. If the true pheasants are today still over-split, taxonomically speaking, at least we know now where to begin.

One of the most important aspects of this book is its emphasis on aviculture as an auxiliary aspect of ornithology. Although much is known, and that at least summarized in this volume, about conditions of keeping and rearing many kinds of pheasants, it becomes apparent from a perusal of this work that much remains unknown about the behavior of pheasants. The field is open to the behavior student to whom large aviaries may be available to study mating habits, pair formation, the relationships between adults and young, and a host of other psychological attributes of these relatively easily managed birds. The problem of territory could probably be readily studied among aviary birds. Variations within species would be particularly interesting in this connection. Perhaps the notably bad temper exhibited by species of *Syrmaticus* is directly explainable through a study of their territorial requirements. This is a poignant question to me as the only cock Ijima's Copper Pheasant (S. soemmerringi ijimae) I ever possessed was so incredib-

ly bad-tempered that immediately after mating with a hen of a closely-related subspecies, S. s. soemmerringi, he reached forward and broke her neck with a swift twist of his bill.

In short this is a magnificent book and must find its way into the library of every serious student of game birds, whether ornithologist, aviculturist, or sportsman. I cannot praise it highly enough as a many faceted accomplishment of one man. It seems unjust to carp about small details and I will not beyond saying that the spelling of some of the geographical names, particularly in the region of India, is not always according to current practice. Nor is the Barail Range (mentioned on p. 69) anywhere except in Cachar and the Naga Hills, rather than outside of these districts as implied. But this is quibbling. The plates by Mr. J. C. Harrison are excellent, even imparting a rough tweedy feeling to the birds as if they were being watched out of doors on a cold bracing day. A few are entirely too rough, however. The Sonnerat's Junglefowl is not done justice to by any means, and, at least in my copy, Rheinart's Crested Argus seems far too washed-out, and the Congo Peacock altogether too bright. However, these could easily be faults of the printing, quite out of the hands of the artist. In any monograph of this sort it might have been well to have listed, along with the scientific description of the bird, a citation of when, if ever, it had been illustrated in a publication.

Suffice it to say in any case that this volume is a "must" and well merits the great success and popularity it is bound to achieve.—S. Dillon Ripley.

ECOLOGICAL ANIMAL GEOGRAPHY. By W. C. Allee and K. P. Schmidt. Revised second edition, 1951. (Based on *Tiergeographie auf oekologischer Grundlage*. R. Hesse). John Wiley & Sons, Inc., N. Y., $5\frac{3}{4} \times 9$ in., xiv + 715 pp., 142 figs. \$9.50.

Appearing fourteen years after the first (1937) edition, this useful work has been thoroughly revised and brought up to date. The 597 pages of the original edition have been expanded to 715. The improvements, as stated by the authors, are: "a greatly simplified terminology; a suitable background, without undue emphasis, for modern interest in conservation on a world-wide scale; expansion and revision of a large amount of material; expanded chapter bibliographies, including pertinent recent publications." With these changes the present edition is still more independent of the German original published in 1924, but even so large blocks of the original remain, as the authors acknowledge. The organization and chapter headings remain virtually unchanged. Even the separate paragraphs follow those of the first edition in their organization and contents, but new sentences have been added and phrasing altered to incorporate the large amount of new material that has been skilfully integrated with the old.

The bibliographic citations are fuller than in the carlier edition; titles are included and papers are arranged alphabetically by authors at the end of each chapter. Approximately one-seventh of the papers cited are new ones published since 1937. The authors state that age alone is little indication of the value of a given report, but that older papers may have special value when they accurately describe conditions of existence that were present years ago.

More than a dozen subjects are mentioned in the preface as illustrating the nature and scope of the revisions and additions in this second edition. One of these is "the concept of the biome, with a schematic map showing the biomes of the world." Discussion of the biome concept, however, is limited to one short paragraph. This brief discussion serves mainly to point out that the biome system cuts across Hesse's useful classification of the habitable world, the "biosphere," with successive divisions, into biocycles, superbiochores, biochores, biotopes and facies, a classification based primarily on physical